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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)

Revision of the Commission's Rules to En-)
sure Compatibility with Enhanced 911 Emer-)
gency Calling Systems)

CC Docket No. 94-102
RM-8143

To: The Commission

DOCKET FILE COPY ORIGINAL

PETITION FOR RECONSIDERATION

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PETITION FOR RECONSIDERATION

BellSouth Corporation ("BellSouth"), by its attorneys, hereby petitions for reconsideration of *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 96-264 (July 26, 1996), *summarized* 61 Fed. Reg. 40348 (Aug. 2, 1996). Specifically, BellSouth urges the Commission to reconsider the requirement that wireless providers pass both Automatic Number Identification ("ANI") and pseudo-ANI to public safety answering points ("PSAPs") within 18 months of the effective dates of the rules. Additionally, the Commission should both clarify that wireless providers are not required to provide call back information for handsets that are not service initialized and specifically exempt wireless providers from liability arising from implementation of these rules. Finally, the Commission should not impose a five-year deadline for Phase II implementation.

BACKGROUND AND SUMMARY

On October 19, 1994, the Commission released an *NPRM* proposing the adoption of a variety of rules and deadlines for making 911 services available to customers calling from Private Branch

Exchanges (“PBXs”) and wireless systems connected to the telephone network.¹ BellSouth supported the overall objective of making 911 services accessible to PBX and wireless users, but indicated that the proposals set forth in the *NPRM* were premature.² Slightly more than a year later, the Commission issued a further public notice requesting comments on a Petition for Rule Making submitted by the Ad Hoc Alliance for Public Access to 911 (“Alliance”) requesting that the Commission adopt rules requiring the prompt connection of 911 calls based on strongest signal selection, without presubscription.³ BellSouth opposed the Alliance’s proposal due to the lack of standards and proven location technologies. Instead, BellSouth urged the Commission to support and facilitate the ongoing technological developments underway by affected groups.⁴

On February 16, 1996, the Commission requested comments on a “Consensus Agreement” (hereinafter “Agreement”) between various wireless and public safety service providers regarding E911 implementation.⁵ Although BellSouth supported the Consensus Agreement as a step in the right direction toward facilitating wireless compatibility with E911, it suggested that the Commission seek further information from affected groups regarding the complex technical and standards issues and location technologies associated with E911 prior to setting deadlines for E911

¹ *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Notice of Proposed Rulemaking*, 9 F.C.C.R. 6170 (1994).

² BellSouth Comments, CC Docket No. 94-102 at 3, 11-14 (Jan. 9, 1995).

³ Public Notice, Commission Seeks Comment on Petition for Rulemaking filed by Ad Hoc Alliance for Public Access to 911, CC Docket No. 94-102, 60 Fed. Reg. 58593 (Nov. 28, 1995).

⁴ BellSouth Comments, CC Docket No. 94-102 at 2 (Dec. 15, 1995).

⁵ Public Notice, Commission Seeks Additional Comment Regarding the Consensus “Agreement,” CC Docket No. 94-102, 61 Fed. Reg. 6963 (Feb. 23, 1996).

implementation.⁶ BellSouth and others expressed concern that the provision of ANI or calling party number information within the proposed Phase I time frame may not be technically or economically feasible.

Despite the objections of BellSouth and others, on June 12, 1996, the Commission adopted rules which establish strict timetables for the provision of ANI and pseudo-ANI to PSAPs. BellSouth still is not convinced that the timetables contemplate the substantial technical challenges and implementation issues involved and requests that the Commission reconsider its decision. Specifically, despite the Commission's requirement that wireless providers pass both ANI and pseudo-ANI to PSAPs, it currently is not possible to provide both forms of information concurrently. Until standards groups establish a meaningful solution and time frame for providing ANI and pseudo-ANI concurrently, the Commission should only require wireless providers to pass ANI or pseudo-ANI to PSAPs.

Additionally, the Commission should clarify that its rules do not require wireless providers to provide call back information to PSAPs with regard to non-service initialized handsets. In many cases, handsets emitting a code identification will not give wireless providers sufficient information to provide PSAPs with accurate call back information. Conversely, service initialized handsets generally provide wireless providers with enough unique information about a caller to provide accurate call back information to PSAPs. Accordingly, the Commission should clarify that, although wireless providers must pass along to PSAPs all 911 calls placed from handsets emitting a code identification, call back requirements relate only to service initialized handsets.

⁶ BellSouth Comments, CC Docket No. 94-102 at 3-6 (Mar. 4, 1996).

The Commission also should reconsider its decision not to exempt wireless providers from liability associated with implementation of these new rules. Such an exemption is necessary because, contrary to the Commission's assertions, wireless providers will not be able to deal with the liability issue in customer contracts because the rules impose obligations on wireless providers with regard to non-service initialized handsets (*i.e.*, non-subscribers).

Finally, the Commission should reconsider its five year deadline for implementing Phase II. Under this Phase, covered wireless providers will be required to provide PSAPs with the location of the emergency caller within a radius of 125 meters. *Order* at ¶¶ 67-72. BellSouth believes that this requirement should not be imposed, however, because currently there is no mechanism for providing this information.

I. THE COMMISSION SHOULD REVISE ITS PHASE I REQUIREMENT TO REQUIRE WIRELESS PROVIDERS ONLY TO PASS ANI OR PSEUDO-ANI BECAUSE IT IS NOT TECHNOLOGICALLY FEASIBLE TO PASS BOTH ANI AND PSEUDO-ANI AT THIS TIME

Throughout this proceeding, BellSouth has expressed concerns regarding the technical feasibility of the time frames for passing ANI and pseudo-ANI to PSAPs.⁷ Despite its reservations, BellSouth supported a requirement that would require wireless providers to provide pseudo-ANI information within 1 to 2 years based on its belief that it would be technologically possible to provide such information within this time period.⁸ The adopted rules, however, go far beyond what BellSouth supported and what BellSouth believes is technically feasible. Specifically, the Commission has adopted rules which would require wireless providers to provide BOTH ANI and

⁷ See BellSouth Comments, CC Docket No. 94-102 at 12-13, 16-18 (Jan. 9, 1995); BellSouth Comments, CC Docket No. 94-102 at 4-5 (Mar. 4, 1996).

⁸ *Id.*

pseudo-ANI within 18 months of the date the rules become effective. *Order* at ¶ 63. Although it should be possible to provide either type of information on a stand-alone basis within the 18 month window, it is not possible to pass both types of information concurrently.⁹

Both ANI and pseudo-ANI cannot be passed under either multi-frequency (“MF”) or signaling system 7 (“SS7”) set-up protocols. Although Bellcore has issued a specification (GR145) which would permit passage of both ANI and pseudo-ANI using an MF protocol, further standards must be developed through IS93 before an MF protocol could be used to pass this information. Further, most development efforts are focused on out-of-band signaling protocols such as SS7. Requiring wireless providers to pass ANI and pseudo-ANI to PSAPs under an MF arrangement will hinder the rapid development of such protocols in favor of developing an inefficient, interim MF protocol capable of complying with the Commission’s rules. Even if efforts were focused primarily on an MF solution, however, it would be impossible to comply with the Commission’s deadline for implementation because manufacturers estimate that it will take more than 18 months to implement the necessary protocols.¹⁰ This would be in addition to the time needed to develop standards.

With regard to SS7, BellSouth concurs with Motorola’s assessment that, although this set-up protocol has the data capacity to carry both ANI and pseudo-ANI, there currently are no protocols available to permit SS7 networks to carry both forms of information.¹¹ Unfortunately, “a new SS7 application protocol must be defined by standards bodies, implemented, tested, and deployed in both

⁹ See Motorola Comments, CC Docket No. 94-102 at 4-5 (Mar. 4, 1996); Northern Telecom, Inc. (“Nortel”) Comments, CC Docket No. 94-102 at 4 (Mar. 4, 1996).

¹⁰ See Motorola Comments, CC Docket No. 94-102 at 4-5 (Mar. 4, 1996); Nortel Comments, CC Docket No. 94-102 at 4 (Mar. 4, 1996).

¹¹ Motorola Comments at 4.

wireless and wireline networks before both ANI and pseudo-ANI can be transmitted.”¹² Based on the experience of these equipment and switch manufacturers, it will take “18-24 months *after standards are promulgated*” to begin testing products.¹³ Thus, the Commission’s timetables are unworkable. Because an MF solution would be an interim solution at best — because most systems are moving to out-of-band protocols — efforts should be focused on developing the appropriate SS7 application protocols.

Today, cell site information is often transmitted over central automated message accounting (“CAMA”) trunks. CAMA trunks, however, limit the information that can be carried to seven digits. In order to transmit both pseudo-ANI and ANI, however, a signaling mechanism must be capable of carrying at least 10 digits.¹⁴ Thus, even if the necessary SS7 or MF protocol existed, the information could not be passed to PSAPs because “the selective routers in the 911 tandem currently route calls to PSAPs based on 7 digit ANI.”¹⁵ New selective routers must be installed in LEC networks before 10 digit ANI and pseudo-ANI can be passed to PSAPs from systems using SS7 or MF protocols. Until these routers are installed, only ANI or pseudo-ANI can be transmitted, but not both.¹⁶ Although Nortel indicated that a signaling mechanism such as Feature Group D trunks may be capable of transmitting both types of information, modifications will still be required before this

¹² *Id.*

¹³ *Id.* at 5 (emphasis in original).

¹⁴ *Id.*

¹⁵ *Id.* at 4.

¹⁶ Nortel Comments at 4.

information can be passed to PSAPs.¹⁷ For this reason, Nortel urged the Commission to forbear from imposing a 12-18 month deadline until standards are developed which will permit the necessary information transfer.¹⁸

Rather than fully address these concerns, the Commission proposes to rely on a waiver process. Under this process, carriers are entitled to a waiver of the implementation deadline if: “(1) its network equipment is not capable of transmitting ANI and pseudo-ANI and cannot be upgraded within the Phase I timetable; or (2) the LEC used by the covered carrier to transmit 911 calls to the PSAP does not have the capability of ANI and “pseudo-ANI.” *Order* at ¶ 66. Unless the Commission is requiring entire system conversions, however, the record shows that carriers using Nortel or Motorola equipment will be incapable of meeting the timetable for implementing the ANI and pseudo-ANI requirements. Thus, carriers operating Motorola or Nortel systems will be requesting waivers, as will carriers in markets where the LEC is incapable of passing the information to the PSAP. Accordingly, the number of carriers requesting waivers may equal or exceed the number of carriers complying with the deadline.

Based on the foregoing, the Commission should revise its rules to require wireless providers to pass only ANI or pseudo-ANI to PSAPs within 18 months of the effective date of the rules. The Commission should only require wireless providers to pass both ANI and pseudo-ANI to PSAPs after protocols have been developed and tested.

¹⁷ *Id.* See *Order* at ¶ 65.

¹⁸ Nortel Comments at 4-6.

II. THE COMMISSION SHOULD CLARIFY THAT WIRELESS PROVIDERS ARE NOT REQUIRED TO PROVIDE CALL BACK INFORMATION FOR NON-SERVICE INITIALIZED HANDSETS

The Commission originally proposed to require wireless providers to make 911 call capability available to all “service initialized” handsets only.¹⁹ In the *Order*, however, the Commission determined that its proposal was too narrow and adopted rules which require that, “not later than 12 months after the effective date of the rules adopted in this proceeding, covered carriers must transmit to the appropriate PSAP all 911 calls from wireless mobile handsets which transmit a code identification.” *Order* at ¶ 29. “Code identification,” in turn, was defined as a call originated from a mobile unit which has a mobile identification number (“MIN”) or, in the case of covered specialized mobile radio carriers, the functional equivalent of a MIN.²⁰

A handset which transmits code identification may not transmit the information necessary for call back implementation, however, unless it is service initialized. Thus, the Commission should make clear that wireless providers are not required to make call back features available to non-service initialized handsets.²¹ For example, pre-packaged cellular phones generally contain a manufacturer provided “MIN” which is identical for all of the manufacturer’s phones. Although a wireless provider could make 911 calls available based on this form of code identification, it is not

¹⁹ A handset is “service initialized” when a user purchases services from a wireless service provider for use on the handset. *NPRM*, 9 F.C.C.R. at 6177.

²⁰ *Order* at ¶ 10 n.12. Each handset has a single MIN which is a binary number that the handset transmits as part of the process of identifying itself to wireless networks and is derived from the ten-digit North American Numbering Plan telephone number that generally is programmed into the handset at the time service is initialized. *Id.*

²¹ This also is the case for users whose service has been disconnected. An attempt to call back a disconnected user, especially if the user is outside of its former “home” market, will likely fail since the carrier’s system would no longer recognize the number.

possible to generate a unique call back number until the handset is service-initialized. Similarly, a PCS1900 handset uses a common code embedded in all such handsets to permit "over the air" activation. As with the cellular example, this code is not unique and is insufficient to generate a call back number. Once the handset is service initialized, however, its smart card is programmed to create user validation and a unique customer identification code capable of generating a call back number.

If the Commission were to require wireless providers to pass along E911 information to PSAPs based solely on code identification, there would be a great deal of confusion because MINs are not necessarily unique. A wireless customer, for example, may cancel service and its telephone number may be reassigned to a new customer. If the former customer places a 911 call and the wireless provider is required to pass along call back information, the call back number will be that of the new customer rather than the former customer seeking emergency assistance. Accordingly, there should be no requirement that wireless providers generate call back information for non-service initialized handsets.

III. WIRELESS PROVIDERS SHOULD BE GRANTED THE SAME BROAD IMMUNITY FROM LIABILITY THAT HAS BEEN GIVEN LANDLINE PROVIDERS

The Commission should reconsider issues concerning carriers' and PSAP's legal liability, especially if it requires wireless providers to provide call back information for non-service initialized handsets. As discussed above, wireless providers cannot control the accuracy of information generated from non-service initialized handsets. Thus, they should not be liable for inaccurate information provided to PSAPs with regard to such handsets.

Further, the Commission indicated that it was “not persuaded by the argument advanced by some parties that [it] should provide wireless carriers the same broad immunity from liability that is available to landline local exchange carriers . . . [because] covered carriers can afford themselves similar protection by including similar provisions in contracts with their customers.” *Order* at ¶ 99. This analysis is wanting, however, because wireless providers are not required to file tariffs and will not have a contractual relationship with people placing calls from non-service initialized handsets. Under the original, service initialized, proposal, wireless providers could receive some protection from liability in customer contracts but the code identification requirement that was ultimately adopted undermined this protection. Further, it would be extremely harsh to afford landline carriers broad immunity, when, in most cases, they have an existing relationship with the phone’s owner and receive funds for usage of the phone on a monthly basis, but exclude wireless providers from similar immunity when they may have no ongoing relationship with the emergency caller — and thus little knowledge of the caller — and no revenues from the caller to offset the potential liability. Accordingly, BellSouth respectfully requests that the Commission afford wireless providers the same broad immunity provided to landline carriers in the provision of 911 and E911 capabilities.

IV. THE COMMISSION’S FIVE YEAR DEADLINE FOR COMPLETING PHASE II IS UNREALISTIC AND SHOULD BE ELIMINATED

BellSouth has been active in researching location technologies capable of supporting E911 for more than two years. Based on its experience, BellSouth believes that the five year deadline for providing detailed location information is unrealistic and should be eliminated. In this regard, BellSouth recently issued a Request for Information (“RFI”) to over 150 equipment vendors and organizations involved in 911, wireless, and location technology businesses regarding the ability to

provide detailed location information.²² Of these parties, only nine outlined solutions that they considered available, developmental, or achievable in the future. Generally, responses to the RFI were vague regarding accuracy, confidence factors, and integration with deployed wireless infrastructure. Further, only limited details of vendor capabilities were provided and no party provided assurances that any of the proposed solutions would function across the diversity of BellSouth's systems (PCS and cellular, digital and analog, *etc.*).

The RFI responses provided no evidence that a "single source" end-to-end solution (location determined and passed through to the PSAP) would be forthcoming. Respondents were far from concrete in what they could contribute to an end-to-end solution. Instead, most recognized that partnering would be necessary to develop and support an overall solution. Thus, substantial coordination efforts will be required of vendors before an end-to-end solution regarding location information can be developed. Once a solution is developed, wireless service providers likely will have to assume the role of systems integrators. It will take considerable time after development of a solution for wireless providers to identify the interfaces, internetworking capabilities, and interoperability necessary to comply with Phase II.

Based on the information received in response to the RFI, it is unlikely that end-to-end solutions will exist for real world trial and evaluation until 1998, at the earliest. Accordingly, the Commission should reconsider its decision to require Phase II implementation within five years. Instead, the Commission should plan to convene an industry forum within two or three years to evaluate the status of solution development, the results of any trials, and any new issues that arise

²² See BellSouth Comments, CC Docket No. 94-102, Attachment A (Mar. 4, 1996).

during this development and testing stage. Once this forum is completed, it may be appropriate to mandate time frames for implementation of location identification requirements.

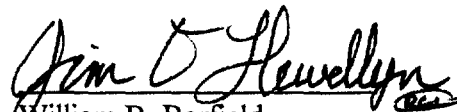
CONCLUSION

For the forgoing reasons, BellSouth urges the Commission to reconsider the adoption of rules which would require wireless providers to pass both ANI and pseudo-ANI before standards necessary for the passage of such information have been developed. Further, the Commission should both clarify that wireless providers are not required to provide call back information to PSAPs with regard to calls made from non-service initialized phones and reconsider its decision not to exempt wireless providers from liability arising from implementation of these rules. Finally, the Commission should eliminate its requirement to provide location information within five years.

Respectfully submitted,

BELLSOUTH CORPORATION

By:



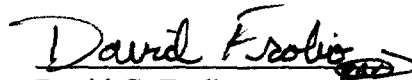
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